APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/028,004	12/21/2001	Robert R. Gilman	401043-A-01-US	2388

24283 7590 11/30/2005	EXAMINER
PATTON BOGGS	SZYMANSKI, THOMAS M
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	ART UNIT	PAPER NUMBER
SUITE 2050	2134	
DENVER, CO 80264		

DATE MAILED: 11/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>03 October 2005</u>.

2a)☒ This action is **FINAL.**   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-18</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-18</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1.   Claims 1-18 have been examined with respect to the amendments.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3.   Claims 16-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Chang et al U.S. Patent No. 5,724,425.

4.   Regarding claims 16 and 17: Hashing a file to produce a hash value (Col 7 lines 1-20) a message digest is used to describe the process of hashing the file. Chang et al states that any known message digest algorithm such as MD2, MD4, or MD5 may be used in the creation of the digest. These algorithms hash the file in this same manner as described by the applicant thus providing for a hash value as the resultant. Encrypting the hash value with a key to generate a signature (Col 7 lines 1-5) Comparing the generated signature with the original (Fig 6(a, b), Col 9 lines 37-47) Chang et al states that the file is hashed (i.e. message digest generated) and the signature is decrypted to provide the original hash value. In this manner Chang et al provides for that which is claimed since these are the same thing by way of a logical transitive relationship. Encrypting the newly generated hash value and comparing that to the provided signature is logically the same as decrypting the original signature and comparing that to the produced hash value.

File is authenticate if signatures match (Col 9 lines 45-46)

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in

section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

such that the subject matter as a whole would have been obvious at the time the invention was made to a

person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived

by the manner in which the invention was made.

6.   Claims 1-5, 10-14 and 16-17 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Chang et al U.S. Patent No. 5,724,425, and further in view of Ho et al

U.S. Patent Publication No. 2002/0073325.

7.   Chang et al ("Chang") has taught the method of authentication as in the claimed

invention, but fails to teach the implementation of an owner key that is unique to the

given computer system.

8.   Ho et al ("Ho"), however, teaches the use of a key specific to the individual

computer system for the purposes of license integrity.

9.   It is desirable to maintain the authenticity of a software program from malicious

attack by worms, viruses and other programs or individuals that have the common intent

of harming a host system. Such programs are known to often compromise critical

information of such a system and cause additional damage. As taught by Chang et al

such attacks are avoidable by the implementation of a signature system that is

composed of a message digest to confirm the integrity of software. Ho teaches that a greater level of security may be obtained by the implementation of a unique key signature of a system so as to prevent that particular license from being compromised (Ho paragraphs 4-12, Chang Col 1 line 50-Col 3 line 13)

10.   It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to combine the system of Ho into that of Chang for the advantages as stated above. The combination of two such systems includes the unique identifier of the Ho system implemented for the key system of Chang while maintaining the ability of Chang to protect the integrity of software the system is expanded to include the feature of uniquely defining the entitlement of the license to the specific computer system, hence avoiding the ability of malicious software to compromise the license.

11.   Regarding claims 1, 2, and 3: Hashing a file to produce a hash value (Change Col 7 lines 1-20) a message digest is used to describe the process of hashing the file. Chang states that any known message digest algorithm such as MD2, MD4, or MD5 may be used in the creation of the digest. These algorithms hash the file in the same manner as described by the applicant thus providing for a hash value as the resultant. Encrypting the hash value with a key to generate a signature (Chang Col 7 lines 1-5, Ho Fig 4 paragraph 33-34)

Comparing the generated signature with the original (Chang Fig 6(a, b), Col 9 lines 37-47, Ho Fig 4 paragraph 27) Chang et al states that the file (software) is hashed (i.e. message digest generated). Within the combined system as done within the Ho reference the signature is generated from the unique identifier of the system upon every

authentication so as to provide for the functionality of specifying the license for a

particular system and performing the integrity check of software as in Chang.

File is authenticate if signatures match (Col 9 lines 45-46)

12.   Regarding claims 4-5 and 10: upon verification of the file replacing the first with

the second. (Col 8 lines 8-16, 58-59, Col 25 lines 27-56) Chang et al states that the

code associated by the signature can take the form of any type of data. As such upon

the authentication of such data it would be necessary to store or act accordingly to the

data type. The execution of pure data in the form of a key for example would only be

feasible for storage or overwriting of pre-existing data as such anticipating the above

claim.

13.   Claims 11-14, 16-17 are a method implementation of the above rejected claims

and as such are rejected upon the same basis.

14.   Claims 6 - 9, 15, and 18 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Chang et al U.S. Patent No. 5,724,425, and Ho et al U.S. Patent

Publication No. 2002/0073325 as applied to claim 1 above, and further in view of

Horstmann U.S. Patent No. 6,044,469.

15.   Regarding claims 6 - 9: Chang et al has taught the method of authentication as

in claim 1 above but fails to teach the implementation of a feature file.

16.   Horstmann, however, teaches the use of such a file to provide for functionality of

subsets of the product.

17.   A plurality of features wherein a subset of the features is activated based upon

the prescribed licensed features. (Horstmann Fig 6, Col 3 lines 39-44, Col 5 lines 54-65)

Horstmann's system of software protection allows for implementation of subsets of a

products full functionality as described.

18.   It would have been obvious to one of ordinary skill in the art at the time of the

applicant's invention to combine the authentication methods of Chang et al with the

functionality of partial licensing as denoted by Horstmann. As it may be seen

(Horstmann Col 2 lines 14-27) one would be motivated to combine these two systems

for added flexibility of ease of configuration of software features and the ability to

maintain security while giving the user further convenience as stated by Horstmann,

thus making this a desirable combination.

19.   Claims 15 and 18 are a method implementation of the above rejected claims and

as such are rejected on the same basis.

Response to Arguments

20.   Applicant's arguments filed 10/03/2005 have been fully considered but they are

not persuasive.

21.   Applicant's arguments with respect to claims 1-18 have been considered but are

moot in view of the new ground(s) of rejection.

22.   Additionally, Applicant's arguments with reference to claims 16-17 are irrelevant

on the grounds that an appropriate amendment to the claims in light of the argument is

lacking and as such the original rejection stands.

Conclusion

23.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

24.   A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

25.   Inquiries concerning this communication or earlier communications from the examiner should be directed to Thomas M. Szymanski who can be reached at (571) 272-8574. The examiner's normal working schedule is between the hours 8:00am – 4:30pm (EST), Monday – Friday.

26.   If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse, can be reached at (571) 272-3838. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

27.   Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

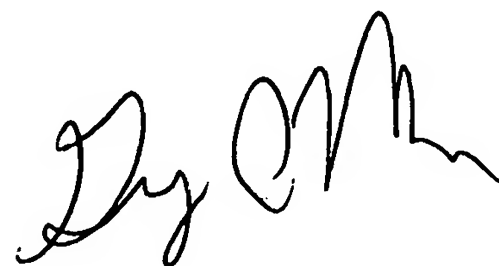Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

JL

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